Nos. 22-1932, -1933, -1934, -1935

United States Court of Appeals for the Federal Circuit

EOLAS TECHNOLOGIES INCORPORATED,

Plaintiff-Appellant,

v.

AMAZON.COM, INC., GOOGLE LLC, WALMART, INC.,

Defendants-Appellees.

Appeals from the United States District Court for the Northern District of California in Nos. 4:17-cv-03022-JST, 4:17-cv-01138-JST, 4:17-cv-03023-JST, Judge Jon S. Tigar

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GOOGLE LLC,

Plaintiff-Appellee,

v.

EOLAS TECHNOLOGIES INCORPORATED,

Defendant-Appellant,

REGENTS OF THE UNIVERSITY OF CALIFORNIA,

Defendant.

Appeals from the United States District Court for the Northern District of California in No. 4:15-cv-05446-JST, Judge Jon S. Tigar

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BRIEF OF APPELLEES

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Claim 32 of U.S. Patent No. 9,195,507 (Appx78) provides:

32. A method, performed by a server computer connected to the World Wide Web distributed hypermedia network on the Internet, for disseminating interactive content via the World Wide Web distributed hypermedia network on the Internet, the method comprising:

A. receiving, by the server computer, a request for information; and

B. transferring, by the server computer, the information onto the World Wide Web distributed hypermedia network on the Internet, wherein:

(i) a World Wide Web browser on a client computer connected to the World Wide Web distributed hypermedia network has been configured with a plurality of different interactive-content applications, each said interactive-content application being configured to enable a user to interact, within one or more World Wide Web pages, with at least part of one or more objects while at least part of each of said one or more objects is displayed to the user within at least one of said one or more World Wide Web pages, and

(ii) at least part of the information is configured to allow the World Wide Web browser on the client computer to:

a. detect at least part of an object to be displayed in a World Wide Web page, and

b. cause a display of the World Wide Web page to a user,

(iii) the World Wide Web browser has been configured to:

a. select an interactive-content application, based upon the information, from among the different interactive-content applications, and

b. automatically invoke the selected interactive-content application to enable the user to employ the selected interactive-content application to interact within the World Wide Web page with at least part of the object while at least part of the object is displayed to the user within the World Wide Web page,

wherein the automatically invoked interactive-content application has been configured to operate as part of a

distributed application configured to enable a user to perform the interaction through the use of communications sent to and received from at least a portion of the distributed application located on two or more distributed application computers connected to the World Wide Web distributed hypermedia network on the Internet, the two or more distributed application computers being remote from the client computer.

CERTIFICATE OF INTEREST

Case Numbers: 22-1932, 22-1933, 22-1934, 22-1935

Short Case Caption: *Eolas Technologies Inc. v. Amazon.com, Inc.*

Filing Party/Entity: Amazon.com, Inc., Appellee

I certify the following information is accurate and complete to the best of my knowledge.

Date: December 15, 2022   Signature: */s/ Gabriel K. Bell*
                            Name: Gabriel K. Bell

1.   **Represented Entities**. Provide the full names of all entities represented by undersigned counsel in this case.

       Amazon.com, Inc.

2.   **Real Party in Interest.** Provide the full names of all real parties in interest for the entities. Do not list the real parties if they are the same as the entities.

       None.

3.   **Parent Corporations and Stockholders.** Provide the full names of all parent corporations for the entities and all publicly held companies that own 10% or more stock in the entities.

       None.

4.   **Legal Representatives.** List all law firms, partners, and associates that (a) appeared for the entities in the originating court or agency or (b) are expected to appear in this court for the entities. Do not include those who have already entered an appearance in this court. Fed. Cir. R. 47.4(a)(4).

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       Fenwick & West LLP: J. David Hadden, Allen W. Wang

Haltom & Doan: Jennifer H. Doan, Jeffrey R. Roeser, Joshua R. Thane

Perkins Coie LLP: Grant E. Kinsel

5.   **Related Cases.** Provide the case titles and numbers of any case known to be pending in this court or any other court or agency that will directly affect or be directly affected by this court's decision in the pending appeal. Do not include the originating case number(s) for this case. Fed. Cir. R. 47.4(a)(5). See also Fed. Cir. R. 47.5(b).

None.

6.   **Organizational Victims and Bankruptcy Cases.** Provide any information required under Fed. R. App. P. 26.1(b) (organizational victims in criminal cases) and 26.1(c) (bankruptcy case debtors and trustees). Fed. Cir. R. 47.4(a)(6).

None/Not Applicable.

CERTIFICATE OF INTEREST

Case Numbers: 22-1932, 22-1933, 22-1934, 22-1935

Short Case Caption: *Eolas Technologies Inc. v. Amazon.com, Inc.*

Filing Party/Entity: Google LLC, Appellee

I certify the following information is accurate and complete to the best of my knowledge.

Date: December 15, 2022   Signature: */s/ David A. Perlson (by permission)*
                           Name: David A. Perlson

1.   **Represented Entities**. Provide the full names of all entities represented by undersigned counsel in this case.

       Google LLC

2.   **Real Party in Interest.** Provide the full names of all real parties in interest for the entities. Do not list the real parties if they are the same as the entities.

       None.

3.   **Parent Corporations and Stockholders.** Provide the full names of all parent corporations for the entities and all publicly held companies that own 10% or more stock in the entities.

       XXVI Holdings Inc.; Alphabet Inc.

4.   **Legal Representatives.**   List all law firms, partners, and associates that (a) appeared for the entities in the originating court or agency or (b) are expected to appear in this court for the entities. Do not include those who have already entered an appearance in this court. Fed. Cir. R. 47.4(a)(4).

       Carl Anderson; Lindsay Cooper; Michael Powell; Michael Trombetta

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include the originating case number(s) for this case. Fed. Cir. R. 47.4(a)(5). See also Fed. Cir. R. 47.5(b).

Eolas Techs. Inc. v. Google LLC, No. 2022-1933 (Fed. Cir.)

Eolas Techs. Inc. v. Walmart, Inc., No. 2022-1934 (Fed. Cir.)

Google LLC v. Eolas Techs. Inc., No. 2022-1935 (Fed. Cir.)

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None/Not Applicable.

CERTIFICATE OF INTEREST

Case Numbers: 22-1932, 22-1933, 22-1934, 22-1935

Short Case Caption: *Eolas Technologies Inc. v. Amazon.com, Inc.*

Filing Party/Entity: Walmart, Inc., Appellee

I certify the following information is accurate and complete to the best of my knowledge.

Date: December 15, 2022   Signature: */s/ Mark C. Fleming (by permission)*
                            Name: Mark C. Fleming

1.   **Represented Entities**. Provide the full names of all entities represented by undersigned counsel in this case.

      Walmart, Inc.

2.   **Real Party in Interest.** Provide the full names of all real parties in interest for the entities. Do not list the real parties if they are the same as the entities.

      None.

3.   **Parent Corporations and Stockholders.** Provide the full names of all parent corporations for the entities and all publicly held companies that own 10% or more stock in the entities.

      None.

4.   **Legal Representatives.** List all law firms, partners, and associates that (a) appeared for the entities in the originating court or agency or (b) are expected to appear in this court for the entities. Do not include those who have already entered an appearance in this court. Fed. Cir. R. 47.4(a)(4).

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      The Heartfield Law Firm: J. Thad Heartfield, Stephen L. Townsend

Durie Tangri LLP: Mark Alan Lemley

Winston & Strawn LLP: Robert L. Green, III, John R. Keville, Eric S. Schlichter

White & Case, LLP: Allen W. Wang, Jason Liang Xu, Thomas C. Flynn

5. **Related Cases.** Provide the case titles and numbers of any case known to be pending in this court or any other court or agency that will directly affect or be directly affected by this court's decision in the pending appeal. Do not include the originating case number(s) for this case. Fed. Cir. R. 47.4(a)(5). See also Fed. Cir. R. 47.5(b).

Eolas Technologies Incorporated v. Google LLC, No. 2022-1933 (Fed. Cir.)

Eolas Technologies Incorporated v. Walmart, Inc., No. 2022-1934 (Fed. Cir.)

Google LLC v. Eolas Technologies Incorporated, No. 2022-1935 (Fed. Cir.)

Eolas Technologies Incorporated v. Google LLC, No. 4:17-cv-01138 (N.D. Cal.)

Eolas Technologies Incorporated v. Walmart Inc., No. 4:17-cv-03023 (N.D. Cal.)

Google LLC v. Eolas Technologies Incorporated et al., No. 4:15-cv-05446 (N.D. Cal.).

6. **Organizational Victims and Bankruptcy Cases.** Provide any information required under Fed. R. App. P. 26.1(b) (organizational victims in criminal cases) and 26.1(c) (bankruptcy case debtors and trustees). Fed. Cir. R. 47.4(a)(6).

None/Not Applicable.

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STATUTE

STATEMENT OF RELATED CASES

The underlying cases gave rise to venue-related mandamus petitions and orders: *In re Google Inc.*, No. 17-107, 2017 WL 977038 (Fed. Cir. Feb. 23, 2017) (Prost, C.J.) (granting mandamus and directing transfer to N.D. Cal.); *In re Google Inc.*, No. 17-103 (Fed. Cir. Nov. 4, 2016) (clerk's order) (dismissing mandamus petition).

In prior appeals involving the patent-in-suit's initial ancestor, which has the same specification, this Court: (a) vacated an infringement judgment because a district court erred in rejecting prior art invalidity defenses in one case, *Eolas Techs. Inc. v. Microsoft Corp.*, 399 F.3d 1325 (Fed. Cir. 2005) (Rader, J., joined by Friedman & Plager, JJ.), and (b) affirmed a district court's judgment of invalidity over prior art in another case, *Eolas Techs. Inc. v. Amazon.com, Inc.*, No. 12-1632, 521 F. App'x 928 (Fed. Cir. July 22, 2013) (Newman, Bryson & Prost, JJ.) (Fed. Cir. R. 36).

A related case is pending but stayed: *Eolas Techs. Inc. v. Wal-Mart Stores Texas, LLC*, No. 6:17-cv-242 (E.D. Tex.). Counsel for Appellees are not aware of other cases pending in this Court or any other court that will directly affect or be affected by the Court's decision in these appeals.

STATEMENT OF THE ISSUE

Whether the district court correctly held that the asserted claims of U.S. Patent No. 9,195,507 (the "'507 patent") are ineligible under 35 U.S.C. § 101.

INTRODUCTION

Starting over 20 years ago, Eolas has indiscriminately sued anyone who provides interactive content on the web—from Microsoft and Adobe to Frito-Lay and Citigroup—alleging infringement of a single patent family. Undeterred by multiple adverse decisions, Eolas secured continuation after continuation in its quest to own "the interactive web as we know it." Plaintiffs-Appellants' Br. 2, *Eolas Techs. Inc. v. Amazon.com, Inc.*, No. 12-1632 (Fed. Cir. Nov. 28, 2012), 2012 WL 6100517. Here, the district court properly rejected Eolas's latest attempt because the asserted claims of the '507 patent are ineligible under § 101 and the two-step framework in *Alice Corp. Pty. Ltd. v. CLS Bank International*, 573 U.S. 208, 216-18 (2014).

In Eolas's own words, the '507 patent reflects an "idea"—"to embed interactive content directly into the previously static web pages." Appx4927. Consistent with that abstract characterization, Eolas insists that its claims cover *any* interactive web-based applications that use generic distributed computing. Indeed, Eolas repeatedly sought (and received) broad constructions of the key claim terms, avoiding any constraints that might limit them to a particular technological solution.

Eolas persuaded the district court to construe the claims to sweep in any distributed interactive applications on the web, no matter how implemented or achieved—a hallmark of ineligibility under § 101. That strategy has consequences.

The asserted claims, as construed, recite purely functional, aspirational language—not any specific technological solution—for enabling interactivity with remote objects on a client computer browser using distributed computing. Consequently, the claims are directed to an abstract idea at *Alice* step one, as the district court held. Appx9-30. Eolas's step one arguments either ignore the plainly functional nature of the claims, or else are divorced from the specification and the claim language itself. Likewise, the components identified in the specification for building the claimed system and achieving its functionality are nothing more than black box recitations of admittedly conventional technology with no new hardware, software, or methods suggested, much less required. The claims thus fail *Alice* step two as well, as the district court also held. Appx30-36. Eolas's contrary arguments identify no inventive concept beyond the abstract idea.

The asserted claims fall squarely within the type of functional, aspirational subject matter—untethered to any technological details or improvements—that § 101 prohibits. The district court's summary judgment of ineligibility should be affirmed.

COUNTER-STATEMENT OF THE CASE

A.   Eolas's Earlier Patents And Prior Litigation

1.   The Ancestor '906 Patent And The *Microsoft* Case

In October 1994, an application was filed for what would become U.S. Patent

No. 5,838,906 (the "'906 patent," Appx12252-12285)—the great-grandparent of the

'507 patent. According to Eolas, it allowed "a Web browser to automatically use

any manner of application to display an embedded object and provide interactivity—

such as editing—of that object within the Web page." Appx5547. In Eolas's view,

the patent "made possible the interactive web as we know it today." No. 12-1632

Plaintiffs-Appellants' Br. 2.

In 1999, Eolas sued Microsoft alleging infringement by its Internet Explorer

web browser. *Eolas Techs. Inc. v. Microsoft Corp.*, 399 F.3d 1325, 1328 (Fed. Cir.

2005). Microsoft argued that the '906 patent was invalid over prior art, including a

web browser (called "Viola") that was already capable of displaying embedded

interactive objects. *Id.* at 1329-30. The district court entered judgment of

infringement, but this Court vacated because the district court erroneously rejected

Microsoft's prior art defenses. *Id.* at 1332-35. On remand, the case settled before a

new trial. Blue Br. 5.

2.   Eolas's Other Failed Suits (*Eolas I* and *II*)

In 2009, Eolas launched a new suit ("*Eolas I*") asserting the '906 patent and a newly-issued continuation. Appx12532-12553. Eolas claimed ownership of all interactivity on the web, suing 23 defendants as disparate as Amazon, Google, Frito-Lay, Citigroup, and Adobe. Eolas insisted: "Dr. Michael Doyle and his co-inventors had an idea that would change the Internet forever. Their idea: to embed interactive content directly into the previously-static web pages." Appx10998.

At trial, the defendants presented evidence that the Viola web browser and other prior art invalidated the patents. Appx10730-10738. A veritable "who's who" of actual web pioneers came to testify about the state of the art in the early 1990s, including Sir Tim Berners-Lee, the widely-acknowledged inventor of the web; Eric Bina, co-founder of Netscape and co-creator of the Mosaic web browser; Pei-Yuan Wei, inventor of Viola; and Dave Raggett, a key contributor to the development of the language of webpages (hypertext markup language, "HTML"). Appx10737. The jury found the asserted claims invalid over Viola and other prior art and the district court upheld that verdict. Appx10726-10741. This Court affirmed. *Eolas Techs. Inc. v. Amazon.com, Inc.*, 521 F. App'x 928 (Fed. Cir. 2013).[1]

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[1]   The defendants never admitted that "Web-browser limited claims would not be obvious." Blue Br. 6; *see* Appx10736-10738; Appx12601-12605.

After that defeat, Eolas asserted two newly-issued continuations in the same family, after Google sought a declaratory judgment of non-infringement. *Google Inc. v. Eolas Techs. Inc.*, No. 3:13-cv-05997-JST (N.D. Cal.) ("*Eolas II*"); Appx12758-12772 (counterclaims). Eolas accused Google of infringement by providing, *inter alia*, "web pages and content to be interactively presented in browsers." Appx10881; Appx10865-10866. In 2014, Eolas voluntarily dismissed its claims with prejudice to moot Google's suit. Appx10885-10887.

B.   The Asserted '507 Patent

In 2011, Eolas filed yet another continuation, which issued as the '507 patent on November 24, 2015. *See* Appx39. The '507 patent is directed to enabling interactivity with remote objects on a client computer browser using distributed computing. Appx39 (Abstract), Appx67 (1:23-26), Appx69 (6:34-7:14).

1.   The Specification

According to the specification, existing web browsers allowed users to view content such as pictures or text. Appx67-68 (1:63-3:49), Appx58 (Fig. 1: prior art). But the specification states that a browser could not provide interactive applications (e.g., programs allowing users to manipulate images) because they required more processing than a user's computer—and network connections—could typically handle then. Appx69 (5:36-6:41); Appx4. The patent's purported solution is distributing processing across multiple computers on the web. Appx69-70 (6:45-

7:34); Appx4-5. "[T]asks" that require a lot of processing may be "performed among two or more computers" (e.g., servers and other computers)—which are "coordinated" to "work together to perform the task." Appx72 (11:10-25).[2]

The specification admits that the purported invention requires no specific improvement in computer or network technology. The computers can be any "type[]" or configuration[]"—including "personal computers" and generic "server[s]"—and require only "basic" and "familiar … components," such as a "processor," "memory," and "keyboard." Appx67-69 (1:27-41, 3:59-4:57), Appx70 (8:7-46); *see* Appx69 (6:14-18) ("client computers," such as "personal computers," are "common[ly] … connected to the Internet"), Appx72 (11:18-22) (task-completion can be coordinated by "any" computers). The specification recognizes that distributed computing, distributed clients and servers, the Internet, the web ("the World Wide Web distributed hypermedia network on the Internet"), webpages (which are "hypermedia or hypertext documents"), web browsers (which could display or access images, text, sound, and video in webpages), and the web's "open" and "widely adopted standard protocols" (e.g., HTML and HTTP) were all well-known. Appx67-68 (1:27-3:50) (citing Appx12097-12102 (Berners-Lee paper)),

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2   The specification never mentions "security," "scalability," or anything of the sort. *Cf.* Blue Br. 19-20, 40-41, 53-54.

Appx68-69 (3:59-5:35), Appx71 (9:43-46), Appx78 (cl. 32), Appx58-59 (Figs. 1-2: prior art).

The specification also admits that no particular implementation is required. Appx5-6; Appx74 (16:56-67) (no "specific logic" required; "various programming languages and techniques can be used"). The purported invention is not "limited" to any specific disclosed examples—"[t]he specification and drawings are … to be regarded in an illustrative rather than a restrictive sense, the invention being limited only by the provided claims." Appx74-75 (16:67-17:3); *see, e.g.*, Appx70 (8:7-54) (Figure 3's "familiar computer components" are "but one example of many possible computer types or configurations"; Figure 4 depicts "basic subsystems," but "[o]ther arrangements of subsystems and interconnections are possible"; Figure 5 depicts network communications but "[o]ther networks and network protocols may be used"); Appx60-61 (Figs. 3-5); Appx5-6.

2.   The Asserted Claims

The asserted claims (claims <u>19</u>, 24, 26, <u>32</u>, 37, 39, and <u>45</u>) are broad. *See* Appx77-79 (independent claims underlined). Despite some seemingly technical jargon, they focus on the abstract concept of enabling interactivity with remote objects on a client computer browser using distributed computing—and recite no specific, much less limiting, way to achieve that aspirational result.

Independent claim 32 recites:

32. A method, performed by a server computer connected to the World Wide Web distributed hypermedia network on the Internet, for disseminating interactive content via the World Wide Web distributed hypermedia network on the Internet, the method comprising:

A. receiving, by the server computer, a request for information; and

B. transferring, by the server computer, the information onto the World Wide Web distributed hypermedia network on the Internet, wherein:

(i) a World Wide Web browser on a client computer connected to the World Wide Web distributed hypermedia network has been configured with a plurality of different interactive-content applications, each said interactive-content application being configured to enable a user to interact, within one or more World Wide Web pages, with at least part of one or more objects while at least part of each of said one or more objects is displayed to the user within at least one of said one or more World Wide Web pages, and

(ii) at least part of the information is configured to allow the World Wide Web browser on the client computer to:

a. detect at least part of an object to be displayed in a World Wide Web page, and

b. cause a display of the World Wide Web page to a user,

(iii) the World Wide Web browser has been configured to:

a. select an interactive-content application, based upon the information, from among the different interactive-content applications, and

b. automatically invoke the selected interactive-content application to enable the user to employ the selected interactive-content application to interact within the World Wide Web page with at least part of the object while at least part of the object is displayed to the user within the World Wide Web page,

wherein the automatically invoked interactive-content application has been configured to operate as part of a

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> distributed application configured to enable a user to perform the interaction through the use of communications sent to and received from at least a portion of the distributed application located on two or more distributed application computers connected to the World Wide Web distributed hypermedia network on the Internet, the two or more distributed application computers being remote from the client computer.

Appx78 (formatting altered).

Claim 32's two dependent claims state that a computer "coordinat[es]" performance of the task (claim 37), and the task is "broken up" over multiple computers, which "work together" (claim 39). Appx78. Eolas conceded that claims 19, 24, and 26 are materially the same as claims 32, 37, and 39, respectively. Appx77-78; *see* Appx28. Eolas also conceded that claim 45 is substantially the same as claims 32 and 39. Appx28. Claim 45 just adds that the application "perform[s] viewing transformations," Appx79, which, as broadly construed, means "operations performed on data for visual display to a user," Appx6551.

3.   The Prosecution History

Prosecution of the application for the '507 patent was largely dormant until after the suits in *Eolas I* and *II* had failed. In August 2014, Eolas cancelled all pending claims and replaced them with 27 other claims (then pending as claims 14-40). Appx10924-10942.

In January 2015, Eolas submitted remarks attempting to distinguish pending claim 14 (which issued as claim 1, and which is not asserted here) from the prior art

and the claims found invalid in *Eolas I*. Appx12836-12846. According to Eolas, claim 14 had (*inter alia*) a "data structure," which purportedly "provides enhanced security" by "control[ing] the selection of the interactive-content application." Appx12842. Eolas strictly confined its remarks to pending claim 14: "the other pending claims in the present application are different than Claim 14, and the descriptions herein with respect to Claim 14 are not meant to limit or describe the other pending claims of the present application in any manner." Appx12845.

No asserted claim recites the "data structure" that Eolas referenced during prosecution. And, contrary to Eolas's assertions (Blue Br. 8-9), Eolas never stated during prosecution that the asserted claims have any "security"-related features. *See* Appx21 n.6.

C.   The Present Litigation

On November 24, 2015, Eolas filed separate suits asserting the '507 patent against Amazon, Google, and Walmart ("Defendants") in the Eastern District of Texas. Appx442-448; Appx449-455; Appx458-464. Eolas asserted infringement by a sweeping array of accused products—essentially anything that provides interactive content on the web using distributed computing.   Appx15328; Appx10322. The Google accused products are: AdWords, Google Search, Google Docs, Gmail, Google Maps, and YouTube. The Amazon accused products are: Amazon Cart, EC2, Amazon Product Viewer, S3, Amazon Search, Shoveler, and

Amazon Video. And the Walmart accused products are: Walmart Search, Walmart Cart, Walmart Product Viewer, and Carousel. Eolas's expert, Dr. David Martin (unrelated to inventor Mr. David Martin), expressed essentially the same infringement theories across all accused products. *See, e.g.*, Appx16707 (472:20-23); Appx18183-18265 at Appx18189-18190; Appx17540-17638; Appx18280-18366; Appx18882-18957.

Eolas filed an early summary judgment motion, arguing that its claims are eligible as a matter of law because they cover "systems and methods for serving distributed interactive applications on the World Wide Web." Appx3560, Appx3564. The Texas court denied the motion, holding that claim construction might impact the analysis. Appx6506-6514 at Appx6514.

1. Claim Construction And Scope

In its claim construction brief, Eolas again insisted: "Dr. Doyle and his co-inventors had an idea that would change the Web forever. Their idea: embed interactive content directly into the previously static web pages." Appx4927. Consistent with that abstract recitation of the purported invention, Eolas urged the Texas court to adopt broad, generic constructions of the claims, requiring no particular technological implementation and omitting nearly all details in the specification. *See* Appx6548-6551.

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On December 8, 2016, the court largely adopted Eolas's broad, generic constructions. Appx6515-6551. For example, as Eolas requested, the court construed "interactive-content application" to mean any application that "enable[s] a user to interact with content." Appx6521, Appx6548. The court rejected Defendants' proposals to construe the term in light of details in the specification. Appx6521-6527. Likewise, the court construed "distributed application" to mean any "application that is broken up and performed among two or more computers"— a "concept" that was "well-understood." Appx6529; *see* Appx6527-6530, Appx6548. The court found also that the "coordinat[ing]" of computers in claim 45 and the asserted dependent claims require only that multiple computers "work together." Appx6540-6542, Appx6549. Eolas also successfully argued that the web browser limitation does not require any particular programming or use of "predetermined" applications. Appx6533-6535.

2.   Transfer To The Northern District Of California

In early 2017, during expert discovery, the Texas court transferred the cases to the Northern District of California. Appx6676-6677; Appx9713-9715; Appx9716-9717; *In re Google Inc.*, 2017 WL 977038, at *1 (granting mandamus). After transfer, at Eolas's request, the case was stayed pending resolution of a prosecution bar motion, which the court denied in late 2019. *See* Appx25001-25025; Appx10084-10086.

In March 2020, per the stipulated schedule, Defendants filed an early summary judgment motion on obviousness-type double patenting, which would have disposed of the case but was "not … the only motion for summary judgment that may be filed."   Appx10218-10224 at Appx10219.   Contrary to Eolas's characterization, the court's April 2021 order (Appx13633-13649) denying Defendants' motion did not "reject[]" Defendants' argument that "the '507 patent recited a 'routine incorporation of Internet technology into existing processes.'" Blue Br. 12.   Rather, the court held that Defendants had not met their summary judgment burden to provide evidence showing that the earlier patent claims and prior art disclosed performing the claimed functions (interactivity and distributed computing) on the web. Appx13639-13644; Appx3, Appx33-34.

Thereafter, per the court's schedule, the parties completed expert discovery, filed *Daubert* motions, and filed summary judgment motions. Appx13680-13682.

3.   Grant Of Summary Judgment Of Ineligibility Under § 101

On February 24, 2022, Eolas and Defendants each filed summary judgment motions. Defendants moved on several grounds, including ineligibility under § 101. Appx15315; Appx16797. In a thorough, 37-page order, the district court agreed that the claims fail under § 101 and denied the other motions as moot. Appx1-37.

At *Alice* step one, the court first reviewed claim 32 at length and determined that, as a whole, it focuses on an abstract idea for providing interactive web content

using distributed computing—i.e., "enabling interactivity with remote objects on a client computer browser using distributed computing." Appx11. The court explained that the claim lacks any details on how the key elements—the "interactive-content application" and the "distributed application"—provide the desired interactivity. Appx12. The court emphasized that Eolas sought and received generic constructions of those terms. Appx11-12. The court noted that, although the specification discusses certain details for providing interactivity using distributed computing, they "are not captured in Claim 32." Appx15.

The court recognized that the purely functional, result-oriented nature of the claim indicates it is directed to an abstract idea. Appx9-13 (citing, e.g., *Interval Licensing LLC v. AOL, Inc.*, 896 F.3d 1335, 1345 (Fed. Cir. 2018); *Affinity Labs of Tex., LLC v. Amazon.com Inc.*, 838 F.3d 1266, 1269 (Fed. Cir. 2016) ("*Affinity Labs II*"); *Affinity Labs of Tex., LLC v. DIRECTV, LLC*, 838 F.3d 1253, 1257 (Fed. Cir. 2016) ("*Affinity Labs I*")). The court also recognized that the claim nowhere improves the computing capacity of client computers or network bandwidth—the problems identified in the specification—and instead requires only generic computer technology and a generic web environment for performing the abstract idea. Appx13, Appx18-20. And the court rejected Eolas's purported "security" improvements because the patent nowhere mentions security, let alone improves it. Appx21-25. Absent specificity "covering a technological solution," the court found

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that the claim had considerable breadth, like other distributed computing claims found abstract and ineligible. Appx15-18 (citing cases).

The court found the other asserted claims were directed to the same abstract idea. Appx25-30. The court explained that dependent claims 37 and 39 recite only breaking up the various tasks and coordinating to complete them—a basic aspect of distributed computing, which is part of the abstract idea. Appx25-28. The court explained that, as Eolas conceded, (a) claims 19, 24, and 26 mirror claims 32, 37, and 39, and (b) claim 45 is substantially similar, with an inconsequential additional limitation for "viewing transformations." Appx28-30; *see* Appx19673, Appx19682-19683; Blue Br. 22, 34, 53. The court recognized that, at Eolas's urging, "viewing transformations" was construed far more broadly than 3D transformations as described in the specification and did not limit claim 45 in a way that rendered it less abstract. Appx29-30.

At *Alice* step two, the court held that, apart from the abstract idea, the claims' additional limitations, individually and combined, added nothing inventive. Appx30-36. The court found that the limitations Eolas identified provided no specific technological solution or improvement, and instead reflected the abstract idea, generic functionality, and conventional distributed computing techniques. Appx32-33. The court rejected Eolas's argument that limiting the claimed functionality to the web context confers patent eligibility. Appx34.

SUMMARY OF THE ARGUMENT

The district court correctly held the asserted '507 patent claims ineligible.

1. At *Alice* step one, the claims are directed to an abstract idea—enabling interactivity with remote objects on a client computer browser using distributed computing—because they are recited in functional, result-oriented language, untethered to any particular technological advance for achieving that goal. Eolas secured broad claim constructions of the key terms—such as the "interactive-content application" and "distributed application"—that are generic and lack any meaningful details. And Eolas itself (and its witnesses) admitted that the point of these claims is providing interactive content in webpages using generic distributed computing components performing their generic computing functions.

Thus, although set in a technological environment, the claims reflect the same kind of generic, result-oriented computer functions that this Court has found to be abstract and ineligible, such as claims for "using graphics instead of programming to create object-oriented simulations" in *Simio, LLC v. FlexSim Software Products, Inc.*, 983 F.3d 1353, 1359 (Fed. Cir. 2020), and "enabling the creation of mobile applications without coding by combining pre-coded software components," in *Aftechmobile Inc. v. Salesforce.com, Inc.*, 853 F. App'x 669, 669-70 (Fed. Cir. 2021).

Attempting to salvage its claims, Eolas distorts the claims' focus and relies on unclaimed details found in the specification but not the claims—the same sort of details that Eolas refused to include in its broad claim constructions that the Texas court adopted. But unclaimed details are irrelevant. *See, e.g.*, *Intell. Ventures I LLC v. Symantec Corp.*, 838 F.3d 1307, 1322 (Fed. Cir. 2016) ("*Symantec*").

Similarly, Eolas incorrectly contends that the claims are non-abstract because they purportedly provide improvements in interactivity, scalability, and security. First, the limited interactivity in existing systems was due to limited processing power, which the patent purports to overcome by distributing the processing across multiple computers—part of the abstract idea itself. The patent uses only admittedly *commonplace* distributed computing techniques and does not purport to improve or describe any particular way of dividing or embedding the processing. And courts routinely hold ineligible claims reciting distributed processing—an abstract idea that has been known for centuries (many hands make light work). Second, the patent does not mention scalability and, regardless, any such benefits flow from using distributed processing—again part of the abstract idea itself. And, third, the patent nowhere mentions security. Eolas makes a new (waived) argument on appeal, relying heavily on a passing security-related statement during prosecution. But that statement was expressly limited to a claim that *is not asserted* here.

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Eolas's other arguments also fail. Eolas incorrectly contends that the district court overgeneralized the claims. But the court carefully considered each claim as a whole and properly recognized, as this Court has elsewhere, that they center on an abstract, functional concept despite their computer features. Eolas also wrongly suggests that the claims are eligible merely because they are set in a web environment or merely because Eolas asserts a technological improvement. This Court routinely rejects those same arguments.

2.   Eolas's arguments at *Alice* step two fare no better. As the district court held, and Eolas does not contest, the claims require only generic computers and servers. Eolas identifies nothing inventive apart from the abstract idea itself. Instead, Eolas contends that the claims as a whole are different from the prior art. But that relates to novelty, not eligibility. That prior art (purportedly) did not provide the recited functions of interactivity and distributed processing *in the web environment* does not make them inventive at step two.

Summary judgment should be affirmed.

ARGUMENT

Section 101 describes subject matter that is eligible for patenting, but "'contains an important implicit exception'" for abstract ideas, which are "'the basic tools of scientific and technological work.'" *Alice*, 573 U.S. at 216 (citation omitted). "'[M]onopolization of those tools" would "'inhibit further discovery by

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improperly tying up the future use of' these building blocks of human ingenuity"
and "'impede innovation more than it would tend to promote it,' thereby thwarting
the primary object of the patent laws." *Id.* (citation omitted). The two-step *Alice*
test governs whether computer-based patent claims are ineligible. *Id*. at 217-27.

At step one, the Court determines whether the claims are directed to an
abstract idea. *Id*. at 218. The Court evaluates "the focus of the claimed advance
over the prior art to determine if the claim's character as a whole is directed to" an
abstract idea. *Intell. Ventures I LLC v. Erie Indem. Co.*, 850 F.3d 1315, 1325 (Fed.
Cir. 2017) ("*Erie*") (cleaned up). Even if claims are limited to a particular
"technological environment, such as the Internet," that does not make the core idea
"any less abstract." *Intell. Ventures I LLC v. Capital One Bank (USA), Nat'l Ass'n*,
792 F.3d 1363, 1366-67 (Fed. Cir. 2015) ("*Capital One*"). And even if "the
techniques claimed are '[g]roundbreaking, innovative, or even brilliant,' … that is
not enough for eligibility"—"'[a] claim for a *new* abstract idea is still an abstract
idea.'" *SAP Am., Inc. v. InvestPic, LLC*, 898 F.3d 1161, 1163 (Fed. Cir. 2018).

Importantly, "[t]he purely functional nature of [a] claim confirms that it is
directed to an abstract idea, not to a concrete embodiment of that idea." *Affinity Labs
II*, 838 F.3d at 1269. This Court has repeatedly held that claims reciting "result-
based functional language" for performing computer processes without "sufficiently
describ[ing] how to achieve these results" are abstract. *Two-Way Media Ltd. v.*

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Comcast Cable Commc'ns, LLC, 874 F.3d 1329, 1337 (Fed. Cir. 2017); *see Interval Licensing*, 896 F.3d at 1346 (claims "recited only at the broadest, functional level, without explaining how that is accomplished," were abstract); *RecogniCorp, LLC v. Nintendo Co.*, 855 F.3d 1322, 1326 (Fed. Cir. 2017) (claims focused on "abstract end-result," not "'specific means or method' for improving technology," were abstract); *Apple, Inc. v. Ameranth, Inc.*, 842 F.3d 1229, 1241 (Fed. Cir. 2016) ("merely claim[ing] the resulting systems," without "particular way of programming or designing the software," is abstract).

At step two, the Court determines whether the other claim elements, individually or collectively, add "significantly more" to the abstract idea— something "inventive"—that transforms the idea into a patent-eligible application. *Alice*, 573 U.S. at 217-22. Implementing an abstract idea with "well-understood," "routine," or "conventional" activities—or limiting it to a particular technological environment—contributes nothing inventive. *Id.* at 225-26. Use of an abstract idea itself cannot supply the requisite inventive concept. *SAP*, 898 F.3d at 1163. Nor can claims simply recite "generic functional language to achieve the[] purported solutions" without claiming "'*how* the desired result is achieved.'" *Two-Way Media*, 874 F.3d at 1339 (citation omitted). And crucially, any inventive concept must be "in the claims," not in unclaimed "technological details set forth in the patent's specification." *Symantec*, 838 F.3d at 1322.

Here, the '507 patent's asserted claims are ineligible because they (i) are directed to the abstract idea of enabling interactivity with remote objects on a client computer browser using distributed computing and (ii) add only non-inventive elements, such as conventional computers and functions.

I.   THE ASSERTED CLAIMS ARE DIRECTED TO AN ABSTRACT IDEA AT *ALICE* STEP ONE

The asserted claims focus on an abstract idea, not any specific improvement in computer technology, as the district court correctly held. Appx9-36. That is evident for two reasons: (a) the claims recite result-oriented functional language, like others this Court has found abstract and ineligible, and (b) the claims' use of distributed computing is analogous to commonplace human division-of-labor concepts. Eolas ignores the plainly functional nature of the claims (secured by Eolas at claim construction), and its arguments are divorced from the claim language and specification.

A.   The Claims Recite Result-Oriented Functional Language, Like Claims This Court Has Found Abstract

The asserted claims are recited in highly generic terms, focusing on "an abstract end-result," not "'a specific means or method' for improving technology." *RecogniCorp*, 855 F.3d at 1326 (citation omitted); *see* Appx11-30. In particular, the claims are directed to the abstract idea of "enabling interactivity with remote objects

on a client computer browser using distributed computing," as the district court held. Appx10.[3]

1.   Independent Claim 32 Is Directed To The Abstract Idea

Claim 32 recites a computer method in which (1) a server sends "interactive content" (an "object") to the user's web browser, (2) the web browser starts an "interactive-content application" to "enable the user" "to interact" with the content, and (3) the interactive-content application's processing is divided up ("distributed") among at least two other computers on the web (i.e., as part of a "distributed application"). Appx78. To achieve these results, the claimed method recites generic computers (a "server," "client computer," and other "computers") that are "configured to" perform basic computer functions, such as "receiving," "transferring," "display[ing]," and "communicati[ng]" information. Appx78.

Critically, claim 32 provides no details explaining *how* to implement the claimed software functions—as the district court found. Appx12; *see Interval Licensing*, 896 F.3d at 1345; *Affinity Labs II*, 838 F.3d at 1269. Rather, Eolas sought, and received, broad functional claim constructions that do not focus on or require any specific ways of achieving those functions or results: an "interactive-content

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   [3]   The district court's articulation of the abstract idea is materially the same as the one proposed by Defendants: "providing interactive applications on the web using distributed computing." Appx9-10. Such "trivial differences in articulations" do not matter. *Simio*, 983 F.3d at 1360.

application" is any application that "enable[s] a user to interact with content" and the claimed "distributed application" is any "application that is broken up and performed among two or more computers." Appx6548; *see* Appx11; *supra* at 11-12. And nearly every limitation relates to the interactive-content application, its functions for providing interactivity, or distributing those functions—confirming that "the heart of the claimed invention" is the abstract idea. *Erie*, 850 F.3d at 1328. Therefore, claim 32 is directed to the abstract idea of enabling interactivity with remote objects on a browser using distributed computing. *See, e.g.*, *Simio*, 983 F.3d at 1360 ("abstract idea of using graphics instead of programming to create object-oriented simulations"); *Aftechmobile*, 853 F. App'x at 669-70 ("abstract idea of enabling the creation of mobile applications without coding by combining pre-coded software components" (citation omitted)).

The specification and Eolas's own prior statements (which it ignores in its brief) confirm that the purported advance, if any, is that abstract idea. *See* Appx69 (6:45-67) (purported invention "allows the user to interact with an application program located at a remote computer" and thereby "use a vast amount of computing power beyond that which is contained in the user's client computer"); Appx14; *supra* at 5-7; Appx3564 (Eolas's MSJ: claims directed to "systems and methods for serving distributed interactive [web] applications"); Appx15475 (¶ 774), Appx15482 (¶ 868) (Eolas's expert: claims cover "systems and methods for serving distributed

applications over the [web]"); *see also Weisner v. Google LLC*, 51 F.4th 1073, 1082-83 (Fed. Cir. 2022) (patentee's characterizations confirmed abstraction).

The specification further confirms that claim 32 merely *uses*—not *improves*—conventional computer and network technology. *Supra* at 5-7; *see Universal Secure Registry LLC v. Apple Inc.*, 10 F.4th 1342, 1354-55 (Fed. Cir. 2021) (specification confirmed technology was conventional). Eolas's witnesses admitted as much. The patent uses only commodity hardware. Appx16643 (Mr. Martin Dep. 54:19-23); Appx15548 (Doyle Dep. 402:5-11). It does not change any existing web protocols, instead relying on conventional communications. Appx16653 (Mr. Martin Dep. 127:4-13), Appx15503 (Doyle Dep. 21:2-8), Appx15543-15545 (Doyle Dep. 371:18-73:25). And it does not propose any new form of coordinated distributed computing, instead relying on admittedly commonplace distributed techniques. Appx16644 (Mr. Martin Dep. 55:7-15), Appx16659-16660 (Mr. Martin Dep. 233:8-234:19); *see also* Appx16635-16645 (Mr. Martin Dep. 46-56); *infra* at 34-35. Eolas provided no response to that testimony in the district court or on appeal.

Additionally, the expansive scope that Eolas seeks to capture confirms that its claims are too generic to satisfy § 101. *See Capital One*, 792 F.3d at 1369 ("breadth" confirms abstraction); *Symantec*, 838 F.3d at 1321 (broad "preemption may signal patent ineligible subject matter" (citation omitted)). Inventor Dr. Doyle, who helped draft the claims, testified that they cover a "*limitless*" range of interactive web-based

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applications allowing users to "access powerful remote resources." Appx15546-15547 (389:19-390:5) (emphasis added), Appx15514 (216:4-5); *see* Appx15504-15528 (33-36, 187-90, 214-23, 281, 293-98), Appx15538-15542 (358-59, 362-64); Appx12969 (Doyle Decl. ¶ 3). This is in keeping with Eolas's characterization of the patent as reflecting the "idea" of "embed[ding] interactive content directly into … web pages," Appx4927, and Eolas's ambition to own "the interactive web as we know it today," *supra* at 3 (citation omitted). And Eolas now wields these "limitless" functional claims against a staggering and indiscriminate array of interactive web-based products—everything from Gmail to Google Maps, Amazon Cart to Amazon Video, Walmart Search to Walmart Product Viewer, and more. *Supra* at 10-11. These are the sort of sweeping claims that inhibit, rather than enhance, innovation—precisely what § 101 forbids. *See Alice*, 573 U.S. at 216; *O'Reilly v. Morse*, 56 U.S. (15 How.) 62, 112-14 (1854).

Eolas argues that "the claims come nowhere close to preempting" the abstract idea. Blue Br. 51. But "the absence of complete preemption does not demonstrate patent eligibility." *BSG Tech LLC v. Buyseasons, Inc.*, 899 F.3d 1281, 1291 (Fed. Cir. 2018) (citation omitted). Even narrow claims, if not limited to any particular way achieving their results, necessarily preempt future inventors from achieving those same results, even if narrow, in new and better ways. *See, e.g., id.*; *SAP*, 898 F.3d at 1169 ("narrow embodiments of ineligible matter … are still ineligible").

Regardless, Eolas's attempt to monopolize interactivity on the web *is* breathtakingly broad. *See* Appx21353 n.2.

This Court has repeatedly found claims abstract and ineligible where (as here) they recite only functional language dividing processes over various computer components without limiting how to achieve those functions. For example, in *Interval Licensing*, the ineligible claims recited nine computer modules ("instructions") for coordinating user interaction and the display of content, including an "attention manager" component for arranging the content. 896 F.3d at 1339-40, 1344-45. The claims were abstract at step one because, "in light of the broad, result-oriented construction for 'attention manager,'" the claims included no details on "how the attention manager perform[ed] the function[s]" or "*how* to engineer or program the display"; the claims "simply demand[ed] the production of a desired result … without any limitation on how to produce that result." *Id*. at 1345. Similarly, here, claim 32 recites only functional steps for enabling interactivity in a browser using generic distributed computing without explaining how to achieve these results—especially given the broad constructions that Eolas secured.

In *Aftechmobile*, the remarkably "lengthy" claims recited computer programs and methods that "allowed technically unsophisticated users to create mobile applications without coding by integrating pre-coded software with new applications to connect to backend databases." 853 F. App'x at 669-70. The claims there recited,

inter alia, network-based "mobile application development software," "pre-coded software components" (including "interactive elements configured to enable interactions with said data" and "hierarchical layers of data") "encapsulated in a mobile application creation interface," user selection of software components, and creation of the application within the interface. *Aftechmobile Inc. v. Salesforce, Inc.*, No. 19-cv-05903-JST, 2020 WL 6129139, at *3-4 (N.D. Cal. 2020), *aff'd*, 853 F. App'x 669, 669-70 (Fed. Cir. 2021). Yet this Court found the claims recited only "desired functions without corresponding recitations on how to achieve or implement those functions"—and thus were directed to "the abstract idea of enabling the creation of mobile applications without coding by combining pre-coded software components." 853 F. App'x at 669 (citation omitted).

Here, claim 32's central software concept (*dividing* an application's processing) is just as abstract as the one in *Aftechmobile* (*combining* an application's processing blocks). And like in *Aftechmobile*, claim 32 here recites purely functional language—generic computer components "configured to" allow interactivity and other functionality—to achieve the desired results, and is thus abstract.

In *Two-Way Media*, the claims purportedly provided "an improved scalable architecture for delivering real-time information" over a network, with an "[e]mbedded … control mechanism that provides for the management and administration of users." 874 F.3d at 1333-34. Although the claims recited detailed

steps for "'converting'" data streams into smaller "packets" for easier transmission, "'controlling the routing … in response to selection signals received from the users,'" and "'monitoring'" key data, they did "not sufficiently describe how to achieve these results in a non-abstract way." *Id*. at 1337-38 (citations omitted). The claims were abstract because they recited "generalized steps to be performed on a computer using conventional computer activity." *Id.* at 1337. Likewise here, the generic steps for communicating, distributing, and displaying information focus not on any "specific means or method," but are "instead directed to a result or effect that itself is the abstract idea and merely invokes generic processes and machinery." *Id.*

Several other cases reach the same result in indistinguishable circumstances. In *Affinity Labs I*, the claims recited a "downloadable application" that was "configured to" retrieve remote information and provide an interactive "user interface" that displayed "a partial listing of available media sources" with a "selectable item" allowing the user to retrieve content. 838 F.3d at 1255-57. The claims were "entirely functional in nature" and "untethered to any specific or concrete way of implementing" the desired results—and thus directed to the abstract idea of "providing out-of-region access to regional broadcast content." *Id.* at 1258; *see also Affinity Labs II*, 838 F.3d at 1269 (abstract idea of "delivering user-selected media content to portable devices").

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In *Simio*, the claims recited several components for creating graphics-based "object-oriented simulations"—including "'base objects created from … graphical processes,'" a "'new object'" with a particular "'3-tier structure,'" and an "'executable process to add a new behavior directly to an object instance.'" 983 F.3d at 1357, 1359-60. Yet the claims did not explain "how the *computer's* functionality is improved" or any "'specific rules' to achieve 'an improved technological result." *Id.* at 1361 (citation omitted). Thus, despite the patentee's assertion of "'improvements to computer-implemented simulation,'" the claims were directed to the "abstract idea of using graphics instead of programming to create object-oriented simulations." *Id.* at 1360-61.

And in *Free Stream Media Corp. v. Alphonso Inc.*, the claims recited a television, servers, and a mobile device that could "process an embedded object, constrain an executable environment in a security sandbox, and execute a sandboxed application in the executable environment"—but did not sufficiently "identify how [their] functional result is achieved." 996 F.3d 1355, 1363 (Fed. Cir. 2021) (cleaned up). Thus, despite the patentee's assertion of an "improvement to computer functionality," the claims were directed to "the abstract idea of providing targeted advertising to the mobile device user." *Id.* at 1364-65.

So too here: Claim 32's recitation of similar computer-based features— including interactive applications, embedded objects, and network-based

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information retrieval—is purely functional and aspirational, and thus directed to an abstract idea.

2. The Other Asserted Claims Are Directed To The Same Abstract Idea

The other asserted claims are equally generic and directed to the same abstract idea. First, claim 32's dependent claims—claims 37 and 39—recite only that a computer "coordinat[es]" task performance (claim 37), and the task is "broken up" over multiple computers, which "work together" (claim 39). Appx78. But coordinating and working together to perform tasks broken up over multiple computers is the very definition of distributed computing—i.e., part of the abstract idea. Appx25-28; *see* Appx6548 ("distributed application": any "application that is broken up and performed among two or more computers"). And, as the district court held, the claims "do not specify how to distribute the computing work" in any particular, let alone technologically improved, way. Appx27. As with claim 32, claims 37 and 39 require only conventional computers performing well-known distributed computing techniques. *See, e.g.*, *BSG*, 899 F.3d at 1287 n.1 (dependent claims focused on same abstract idea as independent claim).

Second, Eolas admits that claims 19, 24, and 26, are materially identical to claims 32, 37, and 39, respectively. Blue Br. 22, 34; Appx28. They recite a generic "server" (with a processor and memory device) that performs the same method steps—which does not alter the analysis. *See Alice*, 573 U.S. at 226 (system claims

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that "are no different from the method claims in substance" are abstract "for substantially the same reasons").

Third, Eolas acknowledges that claim 45 is materially similar to claims 32 and 39. Blue Br. 35; Appx28. Claim 45 adds merely that the application "perform[s] viewing transformations"—another purely functional, generic limitation for displaying the interactive content. Appx79. Indeed, as construed (at Eolas's urging), that limitation just means any "operations performed on data for visual display to a user." Appx6543-6545. Eolas insisted during claim construction (and the Texas court agreed) that the term was not limited to disclosed embodiments. Appx6543-6545.[4] Accordingly, as the district court explained, that limitation does not require any particular operations (e.g., the ones in Figures 9 and 10) or any improved technology. Appx29-30 (citing Appx6543-6545). That generic display limitation does not save claim 45 from abstraction. Appx30; *see Electric Power Group, LLC v. Alstom S.A.*, 830 F.3d 1350, 1354-55 (Fed. Cir. 2016) (display limitation is "abstract" and "ancillary").

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[4] Eolas asserts that the district court "must have been confused" in stating that the term "'was construed to *exclude* embodiments described in the specification.'" Blue Br. 54 (emphasis added) (quoting Appx29). But, in context, it is clear the court simply meant the term was construed to not be *limited* to embodiments regarding 3D views. Appx29 (citing Appx6543-6545). Indeed, due to the claim construction, no party asserts that "viewing transformations" are limited by the specification.

Therefore, like claim 32, the other asserted claims do not specify how the recited functions are performed. At most they restate or "minimal[ly] narrow[]" the abstract idea, which does not save the claims at step one. *BSG*, 899 F.3d at 1287.

B. The Claims' Use Of Distributed Computing Is Akin To Basic Human Teamwork Or Project Management

The claims' use of distributed computing is akin to an age-old concept: many hands make light work. For example, military commanders or business managers (1) interact with a superior to receive instructions (like the "interactive-content application" here), (2) distribute tasks among multiple subordinates (like the "distributed" computers that are "coordinated" to "work together to perform [a] task" here), and (3) report back with any updates or results (like displaying the results here). *See* Appx72 (11:3-25), Appx77-79 (asserted claims). The claims' reflection of longstanding or fundamental concepts is another indication of abstraction. *See Symantec*, 838 F.3d at 1314 ("'fundamental … practice[s] long prevalent' are abstract ideas" (quoting *Alice*, 573 U.S. at 219)); *Appistry, Inc. v. Amazon.com, Inc.*, 195 F. Supp. 3d 1176, 1178-80 (W.D. Wash. 2016) (claims directed to "abstract idea of distributed processing akin to the military's command and control system" (citation omitted)), *aff'd*, 676 F. App'x 1008 (Fed. Cir. 2017).

Employing such a concept in the "particular … technological environment" of the web does not make it "any less abstract." *Symantec*, 838 F.3d at 1319 (citation omitted); *see id.* at 1313-14 (claims for "filtering e-mails that have unwanted

content" were akin to human activities and abstract despite "'particular technological environment of the Internet'" (citation omitted)); *Capital One*, 792 F.3d at 1369-70 (claims for providing customized webpages were akin to human activities and abstract).

Indeed, numerous decisions hold that claims for distributed computing, including coordination to break up tasks across multiple computers, are directed to abstract ideas and ineligible. For example, in *SAP*, claims reciting multiple "processors collectively arranged to perform a parallel processing computation"— and "adapted to" receive a "user request" and process a "return object"—were directed to the abstract ideas of "selecting certain information, analyzing it using mathematical techniques, and reporting or displaying the results of the analysis." 898 F.3d at 1165 & n.2, 1167-68, 1170 (emphasis omitted). In *VeriPath, Inc. v. Didomi*, the claims to a purportedly improved system that "allows a component of an application …, in conjunction with other components of a distributed system," to facilitate user interactions, were directed to the abstract idea of "exchanging privacy for functionality." 842 F. App'x 640, 641-43 (Fed. Cir. 2021).

Similarly, in *Coho Licensing LLC v. Glam Media, Inc.*, the claims for "allocating," "sub-allocating," and "dividing" a "task portion" into a "subtask portion" were directed to the abstract idea of "dividing and subdividing tasks for distributed processing." Nos. C 14-01576, et al., 2017 WL 6210882, at *4-5 (N.D.

Cal. Jan. 23, 2017), *aff'd*, 710 F. App'x 892 (Fed. Cir. 2018). And in *Appistry*, the

claims including "task handlers" on multiple networked computers were directed to

"'the abstract idea of distributed processing akin to the military's command and

control system.'" 195 F. Supp. 3d at 1178-80 (citation omitted).

Here, too, simply breaking up a task into smaller tasks "is a relatively simple

and abstract idea." *Coho Licensing*, 2017 WL 6210882, at *5. And here, too, the

claims provide no specific details for performing the distributed computing—no

particular or improved way of dividing up the tasks—and require no "improved

computer or network," just "off-the-shelf computer technology." *SAP*, 898 F.3d at

1168. The claims and specification merely rely on distributed computers for their

conventional use: enhanced processing through division of labor. *See* Appx68-70

(4:35-37, 5:36-52, 6:34-37, 6:65-7:6), Appx72 (11:3-22).[5]

Nor can (or does) Eolas suggest otherwise: its witnesses confirmed that the

patent's distributed computing was well-known. Eolas's expert Dr. Martin admitted

that, "at the time of the '507 patent … the concept of distributed computing was

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[5]   *See also Teradata US, Inc. v. SAP SE*, No. 20-cv-06127, 2021 WL 6332792,
at *8-9 (N.D. Cal. Oct. 5, 2021) ("distributed" "parallel execution of database
tasks"); *Uniloc 2017 LLC v. Netflix, Inc.*, No. SACV 18-2055, 2019 WL 3291581,
at *5 (C.D. Cal. May 14, 2019) (processing tasks "concurrently"); *Device
Enhancement LLC v. Amazon.com, Inc.*, 189 F. Supp. 3d 392, 403-04 & n.15 (D.
Del. 2016) ("[u]sing distributed architecture to enable remote adaptation of
applications beyond the capabilities of an individual device"); *Enpat, Inc. v. Tenrox
Inc.*, No. 6:13-cv-948, 2015 WL 541673 at *1-2, *5 (M.D. Fla. Feb. 10, 2015)
("coordinated management of a project" on server).

well-known in the art." Appx15644 (488:15-17). Likewise, inventor Mr. Martin confirmed that the patent's coordinated distributed processing techniques "were relatively well understood in the common practice at the time." Appx16644 (55:7-15); *see* Appx16635-16645. Mr. Martin also confirmed that the claims fail to explain how to use multiple coordinated distributed remote servers to off-load local processing. Appx16659-16660. Such detail is lacking because the named inventors used "a pretty common standard mechanism for doing parallel processing, which [they] did not invent"; "it would be readily apparent how to divide up a problem and run it across multiple parallel computers"; and "it's not something that [they] would have to instruct somebody on how to do." Appx16659-16660 (233:25-234:2, 234:3-4, 234:6-7). Moreover, Mr. Martin confirmed that Eolas did not invent distributed computing, distributed data objects, distributed applications, the ability for a user to control content at a remote computer, or having a remote computer do extensive computations and return results—and did not modify the hardware in any way to achieve the coordinated distributed parallel processing. Appx16643-16656; *see also* Appx5783 n.5 (Eolas admitting "idea of distributed applications" "was known" in papers back to 1984).

Therefore, these claims fall into "the familiar class of claims that do not 'focus ... on [ ] an improvement in computers as tools, but on certain independently abstract ideas that use computers as tools.'" *SAP*, 898 F.3d at 1168 (citation omitted); *see*

also Simio, 983 F.3d at 1361 (improved processing speed of a task does not render claim patent eligible).

C.   Eolas's Purported Improvements Do Not Confer Eligibility

Before the district court, Eolas argued that its claims addressed two problems: "limitations in the computing power of end users' computers" and "security." Appx18; Appx19678. The district court correctly rejected both. Appx18-25. Now, on appeal, Eolas shifts its approach, contending that its claims are non-abstract because they purportedly provide three benefits: enhanced "interactivity, scalability, and security." Blue Br. 1, 17-21, 29-35. This refashioned argument still fails because the claims provide no specific technological improvement in computer capabilities—any benefits stem from the abstract idea itself, namely "enabling interactivity with remote objects on a client computer browser using distributed computing." Appx10.

1.   The Claims Provide No Specific Technological Improvement In Interactivity

Eolas first asserts the claims provide "[i]mproved Web interactivity." Blue Br. 17-19, 31-34. As Eolas admits, the patent explains that the reason for limited interactivity (the problem being overcome) was insufficient processing power (e.g., to handle "large data objects"), and the purported solution is using "distributed" computing to "br[eak] up" the tasks over multiple computers. Blue Br. 17-19, 32; *supra* at 5-6. But allowing interactivity in web browsers using distributed computing

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is the abstract idea. So the benefits that Eolas identifies cannot confer eligibility as they "flow from performing [the] abstract idea." *BSG*, 899 F.3d at 1288.

Eolas also argues that the patent "improve[s] interactivity" by "relocat[ing]" ("embed[ing]") the interactive content within webpages and the interactive-content application to the web browser—i.e., the browser is "'configured to'" provide interactive content. Blue Br. 31-33 (citation omitted). But that, again, restates part of the abstract idea—allowing interactivity in browsers. And neither Eolas nor the claims provide any details—let alone technological improvement—explaining *how* such embedding (or relocation) should be done or any particular "structural change." *Id.*   Instead, *all* ways of achieving the desired embedded interactivity are encompassed by the generic and functional claim language. *See Free Stream*, 996 F.3d at 1362-63 (ineligible claims recited "process[ing] an embedded object" and "execut[ing] a sandboxed application in the executable environment"). Indeed, as Eolas itself argued during claim construction, "the claims themselves are silent as to *how* or *why* a Web browser is configured the way it is." Appx4943; *see* Appx4939 (arguing "configured" simply means "enabled to," meaning these limitations encompass any configuration and are limited to none).

Eolas similarly argues that the browser "detect[s]" the type of object to be displayed and then automatically "select[s]" and invokes the appropriate interactive application to display it. Blue Br. 33-34. But the claims recite no particular or

technologically improved way of doing so. At this generic level, the patent itself

recognizes that was conventional and well-understood. Appx68-69 (3:5-21, 6:27-

33).   And Eolas and its expert made clear that the concept of "type information"

(associating applications with data types)—discussed in the specification and

unasserted claims—"is not dealt with in claims 19-45."   Appx4943-4944;

Appx12030-12031; *see* Appx6533-6535 (construing claims as not requiring

"predetermined" applications).[6]

Eolas, therefore, cannot rely on such "unclaimed features" from the

specification (or elsewhere) to support eligibility. *Am. Axle & Mfg., Inc. v. Neapco*

Holdings LLC, 967 F.3d 1285, 1293 (Fed. Cir. 2020). Moreover, this Court has held

that identifying attributes of computer information and then automatically

performing certain actions based on those attributes is an abstract concept. *See, e.g.*,

PersonalWeb Techs. LLC v. Google LLC, 8 F.4th 1310, 1315-17 (Fed. Cir. 2021)

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[6]   *See* Appx17455 (Eolas's expert: prior art Mosaic "downloaded" files to be opened with "appropriate 'helper application," launched by browser); Appx19967-19968 (Andreessen, co-creator of Mosaic: Mosaic launched "external viewers or processed internally" for objects "like audio and MPEG" video); Appx15623-15624. Eolas selectively quotes Mr. Andreessen, suggesting that "conventional wisdom" was that *no* executables should be launched on the client. Blue Br. 32. But, per the '507 patent, browsers already could launch helper application executables on the client. The portion omitted by Eolas makes clear that Mr. Andreessen was concerned with launching of "arbitrary," rather than known, executables. Appx19971. Moreover, his lone view was not shared by all—others *were* working on "allowing arbitrary embedded 'things.'" Appx19967.

(managing data based on "content-based identifier"); *Symantec*, 838 F.3d at 1316-19 (performing actions based on e-mail attributes).

2. The Claims Provide No Specific Technological Improvement In Scalability

Eolas's argument that the claims provide "[i]mproved Web scalability," Blue Br. 20, 33-35, also fails. As Eolas admits, any improved "scalability" is the natural result of using distributed processing. According to Eolas, the claims' use of "'distributed'" computers "improved the scalability" because "end users would be 'able to use a vast amount of computing power beyond that which is contained in the user's client computer.'" Blue Br. 32-33 (quoting Appx78 (cl. 32); Appx69 (6:57-67)). And Eolas contends that certain claims (claim 45 and the dependent claims) further address scalability by using computers to coordinate and work together to perform the tasks. Blue Br. 34-35 (citing Appx77-79 (claims 24, 26, 37, 39, and 45)). But that is the result of dividing up labor through distributed computing—again, part of the abstract idea, which does not confer eligibility. *SAP*, 898 F.3d at 1163; *BSG*, 899 F.3d at 1288; Appx19, Appx25-30.

Moreover, the '507 patent never identifies "scalability" as a technological problem it solves. *Supra* at 5-6. Nor did Eolas (and its expert) when first addressing the claims' focus in the district court. *Supra* at 11, 23-24. Scalability is not the focus. *See Simio*, 983 F.3d at 1362 (rejecting patentee's purported advance where specification pays "relatively little attention" to it). Likewise, the claims do not

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provide any specific technological solution to this alleged and unidentified problem of "scalability." The claims recite only results: "coordination computers perform[] coordination" (claim 37); "task is broken up and performed" among computers (claim 38); "computers work together to perform the at least one task" (claim 39); "coordinating by the one or more computers" (claim 45); "coordinating … to enable the separate computers to work together" (claim 45); and "generating and sending … commands … to coordinate activity" (claim 45). Appx78-79; *see* Appx19, Appx25-30. The claims recite no specific method for *how* to perform coordination, *how* to break up a task, or *how* computers work together on a task, let alone methods that definitively provide scalability. Thus, "scalability" does not save the claims. *See Two-Way Media*, 874 F.3d at 1338 (claims that did not "indicate how [they were] directed to a scalable network architecture that itself leads to an improvement in the *functioning* of the system" were abstract).

Eolas argues that "Figures 6 and 10" illustrate how the computers coordinate and distribute information, and that the district court erroneously disregarded them. Blue Br. 20, 52-53. Eolas is wrong. As the district court explained, the figures "do not teach specifically how to distribute the computing work required to enable interactivity on the client computer, or how to coordinate such computing work, in a manner that would circumvent the client computer's computing limitations." Appx20; *see* Appx62 (Fig. 6), Appx66 (Fig. 10). Moreover, as the district court also

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held, the specification states those figures are "illustrative"—they do not limit the claims. Appx74-75 (16:7-17:3). And this Court has "repeatedly held that features that are not claimed are irrelevant as to step 1 or step 2 of the *Mayo/Alice* analysis." *Am. Axle*, 967 F.3d at 1293; *see also, e.g.*, *Yu v. Apple Inc.*, 1 F.4th 1040, 1044-45 (Fed. Cir. 2021) ("mismatch between the specification" details "and the breadth" of the claim "underscores that the focus of the claimed advance is the abstract idea"); *ChargePoint, Inc. v. SemaConnect, Inc.*, 920 F.3d 759, 769 (Fed. Cir. 2019) ("[T]he specification cannot be used to import details from the specification if those details are not claimed."); *Ericsson Inc. v. TCL Commc'n Tech. Holdings Ltd.*, 955 F.3d 1317, 1325, 1327-28 (Fed. Cir. 2020) (rejecting patentee's "reference to 'a specific, layered software architecture'" because it did "not appear in the claims" (record citation omitted)).

For this same reason, Eolas is wrong to argue that claim 45—which is admittedly "similar in scope to" claim 39—recites "viewing transformations [that] help provide the 3D view depicted in the specification's Figures 9 and 10." Blue Br. 35. Eolas successfully argued that "viewing transformations" are *not* limited to 3D transformations like those in the specification, but instead encompass any "operations performed on data for visual display to a user." Appx6551. Once again, Eolas cannot have it both ways—having refused to limit its claims to any particular ways of achieving their functional results, it cannot now inject such details to satisfy

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§ 101. That approach is foreclosed by this Court's precedent, and the district court properly rejected it. *See* Appx29-30 & nn.9-10.

3. The Claims Provide No Specific Technological Improvement In Security

Eolas's contention that its claims provide "[i]mproved Web security," Blue Br. 19-20, 34, is meritless. There is "no indication in the intrinsic evidence that the claimed invention was intended to solve *any* security vulnerabilities"—nothing in the claims nor the specification addresses "preventing hackers from gaining control over a client computer." Appx21. Indeed, the words "security" and "secure" appear *nowhere* in the patent. Appx21. And Eolas and its expert never mentioned security during claim construction or when first identifying the claims' focus. *Supra* at 11-12, 23-24.

Searching for some hook, Eolas argues that the "configured with" clause specifically requires technology that secures against the browser running dangerous applications. Blue Br. 19-20, 34; Appx17400. Not so. As the district court correctly found, this clause simply configures the web browser with a plurality of applications to enable interaction in a webpage; it says nothing of preventing those applications from being dangerous. Appx21. Indeed, Eolas's founder and named inventor Dr. Doyle admitted that the claims simply "*allow* the browser to be configured with a number of … interactive content applications that are known to be safe." Appx21543-21545 (123:15-125:17) (emphasis added). He agreed that the claims do

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not recite that "the browser has to know that the interactive content applications are safe," and that one could "do a poor implementation of [the patent] that could launch unsafe applications." Appx21547 (127:7-25); *see also* Appx21457 (examiner noting that ancestor patent with same specification was "insecure system"). This confirms that security is irrelevant to the scope of the claims, which can be implemented in either a secure or unsecure way.

Further, Eolas's infringement theories underscore the complete lack of security features in the claims. All of Eolas's infringement allegations are based on JavaScript, which has known security drawbacks. As Eolas's expert acknowledged, JavaScripts "are delivered from a remote source and run on a user's computer," which, he admitted leads to "concern[s]" about "whether you are being adequately protected by running that remote program." Appx21468-21469, Appx21472 (75:22-76:19, 79:4-22). He further admitted the security "vulnerabilities that were associated with JavaScript" include the potential for "malicious" activities. *See* Appx21467-21472 (74:1-79:22). But Eolas identifies nothing in the claims (or specification) that provides a specific implementation to secure a client's computer from malicious JavaScript. Defendants raised this point in their reply in the district court (Appx21360-21361), and Eolas ignored it.

Lacking any "security" enhancement in the patent, Eolas turns (for the first time on appeal) to a discussion during prosecution. Blue Br. 8-9, 19-20, 30-31, 34.

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Having not raised below, this argument is waived. *See Athena Diagnostics, Inc. v. Mayo Collaborative Servs., LLC*, 915 F.3d 743, 756 (Fed. Cir. 2019); *Fresenius USA, Inc. v. Baxter Int'l, Inc.*, 582 F.3d 1288, 1295-96 (Fed. Cir. 2009). In any event, Eolas mischaracterizes that this prosecution discussion was about "the asserted claims." Blue Br. 41. In actuality, it was exclusively about one claim (and claim feature) that is *not asserted here*. The applicant argued that *claim 14* (which ultimately issued as unasserted *claim 1*) "provides enhanced security" because it recited, among other features, a "data structure" that controls the browser's selection of the interactive-content application, has associations from data types to corresponding interactive-content applications for those data types, and is accessible to the web browser before receiving any information. Appx12842; *see* Appx12836-12846. Claim 1 is not asserted and the asserted claims do not recite this "data structure."[7] Moreover, the applicant expressly stated that its comments were "*not meant to limit or describe the other pending claims* of the present application *in any manner*." Appx12845 (emphasis added); *see* Appx12837-12845. Thus, unsurprisingly, Eolas has never suggested (in district court or here) that the asserted claims are limited by those prosecution statements. So any argument about an unclaimed feature found only in an unasserted claim is not relevant here. *See*

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[7] Eolas and its expert made clear that the concept of "type information" (associations to data types) is not in the asserted claims. *Supra* at 37-38.

Symantec, 838 F.3d at 1321-22 (features in other claims not relevant); *Am. Axle*, 967 F.3d at 1393-94.

The glaring lack of any reference to security in the '507 patent also distinguishes Eolas's cited security-focused cases. Blue Br. 40-42. For example, in *SRI International, Inc. v. Cisco Systems, Inc.*, the patent described how networks were "'vulnerable to attack'" and explained that the invention was specifically "directed to solving these weaknesses" by providing "'a framework for the recognition of more global threats to inter-domain connectivity, including coordinated attempts to infiltrate or destroy connectivity across an entire network enterprise.'" 930 F.3d 1295, 1303-04 (Fed. Cir. 2019) (citations omitted). This Court found the claims were "directed to using a specific technique—using a plurality of network monitors that each analyze specific types of data on the network and integrating reports from the monitors—to solve" the problems. *Id*. at 1303. Likewise, in *Ancora Technologies, Inc. v. HTC America, Inc.*, the claims "assign[ed] certain functions to particular computer components and ha[d] them interact in specified ways." 908 F.3d 1343, 1344-45 (Fed. Cir. 2018). In particular, "[t]he asserted innovation of the patent" was storing the license record in the "BIOS

memory," which was specifically claimed, and which the patent explained provided a security benefit. *Id.* at 1345-46.[8]

Here, by contrast, the '507 patent never mentions security or identifies a specific security issue, and does not claim a specific way to provide the purported security—as discussed. Appx22-23 & n.8 (distinguishing security cases); *supra* at 42. As the district court noted, "relying on a solution to a problem that was not disclosed in the patent would essentially reward Eolas' failure to disclose that purported solution in the patent, which would be inconsistent with the underlying goal of the patent system." Appx23. Notably, this Court has held ineligible other claims that actually did purport to improve security. *E.g.*, *Universal Secure Registry*, 10 F.4th at 1349-52; *Ericsson*, 955 F.3d at 1325-26. Because Eolas's claims do not do even that, Eolas's invocation of unclaimed and unstated security enhancements cannot save its asserted claims.

4.   Eolas's Remaining Citations Are Also Inapposite

The asserted claims are also not like the type of specific improvements to computer operations or network functionality that this Court found eligible in the other cases Eolas cites. Blue Br. 35-37.

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8   *See also Finjan, Inc. v. Blue Coat Sys., Inc.*, 879 F.3d 1299, 1305-06 (Fed. Cir. 2018); *TecSec, Inc. v. Adobe Inc.*, 978 F.3d 1278, 1296 (Fed. Cir. 2020); *CosmoKey Sols. GmbH & Co. KG v. Duo Sec. LLC*, 15 F.4th 1091, 1099 (Fed. Cir. 2021) (all providing specific security improvements).

In *Koninklijke KPN N.V. v. Gemalto M2M GmbH*, the patent described a specific deficiency of prior art check data generators: they did not reliably detect systematic errors because their generating function was fixed. 942 F.3d 1143, 1146-47 (Fed. Cir. 2019) ("*KPN*"). The patent sought to solve this "by varying the generating function used to produce the check data." *Id*. at 1147. Rather than claiming merely, e.g., "a varying device configured to" vary the generating function, the *KPN* claims recited a specific solution. *Id.* As this Court explained, "the claims do not simply recite, without more, the mere desired result of catching previously undetectable systematic errors, but rather recite a specific solution for accomplishing that goal—i.e., by varying the way check data is generated by modifying the permutation applied to different data blocks." *Id.* at 1147-48, 1150-51. Thus, the *KPN* claims "capture[d] the inventors' asserted technical contribution … by reciting how the solution specifically improves the function of prior art error detection systems"—an undisputed technological improvement. *Id*. at 1151. This is a far cry from the generic, functional, and non-specific "configured to" language here, which recites no technical solution at all, but simply divides up labor among prior art computer components.

In *Visual Memory LLC v. NVIDIA Corporation*, the claims recited a purportedly improved computer cache memory system with a "programmable operational characteristic" that allowed the memory to operate seamlessly and

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efficiently with different types of processors. 867 F.3d 1253, 1255-57 (Fed. Cir. 2017). In contrast, Eolas's claims do not specifically improve the computer components (memory or otherwise) and instead use admittedly generic computers and network technology, without making any improvements to that generic technology. *Supra* at 6-7, 24, 34-35. Eolas relies on the fact that, in *Visual Memory*, the patent included a microfiche appendix with sample computer code, arguing that the '507 patent's attached microfiche appendix supports eligibility. Blue Br. 37. This is misleading at best. In *Visual Memory*, the Court faulted the district court for finding the claim ineligible *on a 12(b)(6)* motion and the Court mentioned the "microfiche appendix" in passing in the context of taking "all factual inferences … in favor of the [patentee]." 867 F.3d at 1261.

By contrast, here, the case traveled far past the pleadings and claim construction already happened. Eolas did not—and could not—suggest that the claims were limited by any code in the microfiche appendix. *See* Appx70 (7:64-8:6) (specification's "source code" in "microfiche Appendices" implements "specific embodiment"); *supra* at 11-12 (Eolas's broad claim constructions). Indeed, until its opening brief on appeal, Eolas *never mentioned* the microfiche—and never presented a copy to the district court or this Court. This argument was, therefore, waived—and, regardless, is but another example of Eolas improperly relying on unclaimed details in the specification. *See Symantec*, 838 F.3d at 1322 ("'[T]he

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complexity of the implementing software or the level of detail in the specification does not transform a claim reciting only an abstract concept into a patent-eligible system or method.'" (quoting *Accenture Global Servs., GmbH v. Guidewire Software, Inc.*, 728 F.3d 1336, 1345 (Fed. Cir. 2013)).

D.   Eolas's Remaining Step One Arguments Fail

1.   The District Court Did Not "Overgeneralize" The Claims Or Improperly Ignore The Web Limitations

Eolas contends that the district court "overgeneralized" the claims and ignored the "web" and "configured to" limitations. Blue Br. 25, 43-44. Not so. The district court properly examined the claims as a whole (including every limitation that Eolas identified) and summarized their central focus—i.e., "enabling interactivity with remote objects on a client computer browser using distributed computing." Appx11; *see* Appx11-30; *supra* at 13-15.

This Court routinely does the same, even with claims longer than Eolas's. *See, e.g.*, *Ericsson*, 955 F.3d at 1325-26 (stripped of "technical jargon," claims directed to "abstract idea of controlling access to, or limiting permission to, resources"); *Electric Power*, 830 F.3d at 1351-52 ("lengthy and numerous" claims— longer than even Eolas's—were directed to abstract idea of "collection, analysis, and display of available information"); *Aftechmobile*, 853 F. App'x at 669-70 ("lengthy" claims—again longer than Eolas's—were directed to "'enabling the creation of mobile applications without coding by combining pre-coded software components'"

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(citation omitted)). And, as discussed, Eolas and its own witnesses recognized that the claims focus on "serving distributed interactive applications on the [web]." Appx3564 (Eolas's MSJ); *supra* at 11, 23-24.

That the district court's articulation of the abstract idea does not specifically mention the "web" does not mean that the court ignored those limitations. Rather, the court expressly held that "the 'World Wide Web' limitations in the asserted claims merely require a particular technological environment," and thus cannot confer eligibility. Appx34; *see also* Appx11 ("the web browser selects and automatically invokes"; "interact with the object within a web page"), Appx33-34 (discussing web limitations). The claims' central concept is abstract whether performed on the web or on the Internet more generally—such "minimal narrowing" does not matter. *BSG*, 899 F.3d at 1287; *supra* at 19, 32-33. And whether adding the web to the claims was sufficient to distinguish them over prior art "is of *no relevance*" to eligibility. *Symantec*, 838 F.3d at 1315 (citation omitted).

Nor did the district court ignore the "configured to" limitations. Blue Br. 48-50. Instead, each "configured" limitation corresponds precisely to the court's recitation of the abstract idea. The court correctly held that the "configured" limitations claimed only results and failed to specify how to provide any specific configuration. Appx12-13. As noted, Eolas itself argued during claim construction

that "the claims themselves are silent as to *how* or *why* a Web browser is configured

the way it is." Appx4943; *see supra* at 37; Appx4939.

Accordingly, this case is unlike *TecSec* (cited at Blue Br. 43-44), where this

Court rejected a recitation of an abstract idea that "disregard[ed] elements of the

claims at issue that the specification ma[de] clear are important parts of the claimed

advance in the combination of elements." 978 F.3d at 1294. Here, the purportedly

disregarded elements are not treated as an important part of the claimed advance—

and do not "change the claim's 'character as a whole'" from one directed to an

abstract idea to one that's not." *Simio*, 983 F.3d at 1362 (citation omitted).

2.   Merely Purporting To Improve Computers, Without Explaining How, Is Not Enough

Eolas hypothesizes (without support) that if "Web users in 1994" were asked

"would enabling interactivity with remote objects on your browser using distributed

computing constitute a new and useful improvement of your computer network,"

they would answer yes. Blue Br. 46-47. But the immediate next question would be:

"*How* do you do that?" Eolas and its asserted claims never say.[9]

At bottom, "'[a] claim for a *new* abstract idea is still an abstract idea,'" which

is why Eolas's hypothetical does not bear on eligibility. *SAP*, 898 F.3d at 1163

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[9]   Eolas observes that the inventors "wrote '375 pages of [s]ource code.'" Blue Br. 46. But the vast majority is prior art Mosaic source code, which they did not write. *See* Appx70 (8:1-4), Appx73 (13:49-56). Regardless, those details are not in the claims—and therefore cannot confer eligibility. *Supra* at 48-49.

(citations omitted). If Eolas's reasoning were the law, then *any* patent claim purporting to improve computer technology would be eligible. Yet this Court has repeatedly found such claims ineligible. *Supra* at 26-29, 33; *see also PersonalWeb*, 8 F.4th at 1315 (ineligible claims purportedly improved networks by "allow[ing] a computer within a network … to locate and distribute data without knowing either the file system of any device within the network or the conventional name of any data item"); *Internet Patents Corp. v. Active Network, Inc.*, 790 F.3d 1343, 1344-45 (Fed. Cir. 2015) (ineligible claims purported to improve systems with better online forms).[10]

Eolas contends that § 101 *does not require* patentees to explain "how" to implement their purported inventions. Blue Br. 48-49. But that argument is foreclosed by this Court's precedent, which has repeatedly held that claims must provide sufficient specificity—the crucial "how"—to satisfy § 101. *See Am. Axle*, 967 F.3d at 1302 (§ 101 "'how' requirement[] … is that the claim itself … must go beyond stating a functional result; it must identify 'how' that functional result is achieved"); *supra* at 19-20, 26-29.

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[10] Eolas argues that the district court conceded that the claims solve the problems of limited processing capacity by using the phrase "claimed invention" when discussing the contents of the specification. Blue Br. 48. In context, the court was referring to the specification's disclosures, *not* what the *claims* require. Appx5-6, Appx14-15, Appx19-20, Appx22.

Likewise, Eolas's invocation of the principle that "'a patent need not teach, and preferably omits, what is well known in the art,'" misses the mark. Blue Br. 48-49 (quoting *Visual Memory*, 867 F.3d at 1261). Eolas cannot argue on one hand that the claims provide specific technological improvements and on the other omit the details of those very purported improvements from the claims. *See, e.g.*, *Ericsson*, 955 F.3d at 1328 ("Merely claiming 'those functions in general terms, without limiting them to technical means for performing the functions that are arguably an advance,' does not make a claim eligible at step one." (citation omitted)). Indeed, as discussed, Eolas deliberately sought—and secured—broad, functional claim constructions to avoid such details. *Supra* at 11-12. Eolas must live with that strategic choice. Just as there was not enough "how" in cases such as *Interval Licensing*, *Aftechmobile*, *Two-Way Media*, *Affinity Labs I and II*, *Simio*, and *Free Stream*, there is not enough here.

The district court correctly held that the claims are directed to the abstract idea of enabling interactivity with remote objects on a client computer browser using distributed computing.

II. THE ASSERTED CLAIMS ADD NOTHING INVENTIVE AT *ALICE* STEP TWO

At *Alice* step two, the Court must determine whether the claims add something significant "apart from" the abstract idea—an inventive concept that "transform[s] the abstract idea … into a patent-eligible application." *Chamberlain Grp., Inc. v.*

Techtronic Indus. Co., 935 F.3d 1341, 1348-49 (Fed. Cir. 2019); *see ChargePoint*,

920 F.3d at 774 (claims must add "'significantly more'" than use of "abstract idea

itself" (citation omitted)). Eolas's asserted claims do not. Appx30-36.

A.   **The Claims Require Only Admittedly Generic Computer And
Network Components**

Eolas's claims recite only generic computing components (server computer,

client computer, web browser, distributed application computers, and coordination

computers) and generic computing functions (receiving, transferring, detecting,

displaying, selecting, invoking, and coordinating). *See* Appx77-79 (cls. 19, 24, 26,

32, 37, 39, 45); *supra* at 6-9. The district court so held, Appx32, and Eolas does not

dispute that on appeal.

The specification admits as much: the computers and servers are generic and

distributed computing, distributed clients and servers, the Internet, the web,

webpages, web browsers, and web protocols were all well-known, as the district

court found. Appx32-33 & n.13; *supra* at 6-7. Likewise, Eolas's witnesses admitted

that these components are not improved computers, their functions are routine and

conventional, and the coordinated distributed processing of the '507 patent was well-

known and common at the time. *Supra* at 6-7, 24, 34-35.

Thus, the claimed components and functions are the same "basic functions of

a computer" and "purely functional and generic" computer and network components

that courts have found merely automate the abstract idea in a "particular

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technological environment"—which is insufficient to add an inventive concept.

Alice, 573 U.S. at 225-26 (citation omitted); *see, e.g.*, *Two-Way Media*, 874 F.3d at

1339 (multiple network components and protocols for sending and receiving

packetized data are non-inventive); *PersonalWeb*, 8 F.4th at 1319 ("merely adding

computer functionality to increase the speed or efficiency of the process" or

"mak[ing] more efficient traditional … methods" is non-inventive (citations

omitted)); *SAP*, 898 F.3d at 1170 (use of "'parallel processing' computing

architecture" is "generic," not inventive); *Capital One*, 792 F.3d at 1369-70 ("adding

computer functionality to increase the speed or efficiency of the process" adds

nothing inventive and "'interactive interface configured to provide dynamic web'"

content is a "generic computer element" (quoting patent)); *Free Stream*, 996 F.3d at

1366 ("[p]rocessing an 'embedded object' … or rendering targeted data 'through a

sandboxed application of a mobile device[]'" using "internet-connected device" is

non-inventive).

The other features recited in the claims also add nothing inventive. First, the

claimed "interactive-content application," Appx77-79 (cls. 19, 32, 45), is a purely

functional, aspirational, black box tasked with performing the abstract idea of

enabling interactivity with remote objects in a browser using distributed computing.

It requires no particular, let alone inventive, configuration or programming. The

"interactive-content application" reflects "the abstract idea itself, which 'cannot

supply the inventive concept.'" *Simio*, 983 F.3d at 1363-64 (quoting *BSG*, 899 F.3d

at 1290); *see also Capital One*, 792 F.3d at 1370-71 (reciting "'software' 'brain'"

configured to perform abstract idea is non-inventive); Appx15502 (Doyle Dep. 15:1-

6) ("Q. What do you view to be innovative regarding the combination of elements

that you just recited from Claim 19? … A. The functionality provided by the system

described in Claim 19 is the innovative capability."); Appx4966 (¶ 37) (Eolas's

expert: "the idea of interactive-content applications … was known" to skilled

artisans).

Second, reciting that computers coordinate and work together on tasks (as in

claim 45 and the dependent claims) adds nothing inventive, and again reflects the

abstract idea. *See* Appx77-79 (cls. 24, 26, 37, 39, 45); *supra* at 30-35. The claims

neither recite nor require any specific improvement in technology to perform that

abstract idea.

Third, claim 45's "viewing transformations" limitation does not add anything

significant. As discussed, it was construed at Eolas's urging to encompass any

"operations performed on data for visual display to a user." Appx6551. It too is

nothing more than a generic aspect of providing interactivity—the abstract concept.

This Court routinely finds that such generic limitations for displaying data (or even

more specific ones) add nothing inventive. *See, e.g.*, *Electric Power*, 830 F.3d at

1355-56 ("'displaying concurrent visualization' of two or more types of

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information" that is "time-synchronized" and in "real time" is "not even arguably

inventive").

Even when viewed "as an ordered combination," the claims "ad[d] nothing …

that is not already present when the steps are considered separately." *Alice*, 573 U.S.

at 225 (citations omitted). For example, the claims' arrangement is like the ineligible

claims in *Electric Power*, which likewise did not "require any nonconventional

computer, network, or display components" and had no "non-generic arrangement."

830 F.3d at 1355. And like the claims here, those "merely call[ed] for performance

of the claimed … functions" without explaining "*how* the desired result is achieved."

Id. Similarly, in *Two-Way Media*, although the claims purportedly "solve[d] various

technical problems, including excessive loads on a source server, network

congestion, … [and] scalability of networks," they used only "generic functional

language to achieve these purported solutions"; this Court "s[aw] no inventive

concept in the ordered combination of these limitations." 874 F.3d at 1339. And,

in *IBM Corp. v. Zillow Group, Inc*., the ineligible claims reciting coordinated

geospatial mapping, interactive user functionality, and synchronized displays added

nothing inventive because "'individually or in combination, the recited limitations

neither improve the functions of the computer itself, nor provide specific

programming, tailored software, or meaningful guidance for implementing the

abstract concept.'" 50 F.4th 1371, 1380 (Fed. Cir. 2022) (quoting *Intell. Ventures I*

LLC v. Capital One Fin. Corp., 850 F.3d 1332, 1342 (Fed. Cir. 2017)). Here, too, the asserted claims use only functional language without describing how to achieve the results with any specific implementation—confirming they add nothing inventive. *E.g.*, *supra* at 22-23, 30-31, 35, 37, 51-55.

For the same reasons, this case is unlike cases where a "specific implementation" or "specific improvement" in computer technology supplied an inventive concept. *BASCOM Glob. Internet Servs., Inc. v. AT&T Mobility, LLC*, 827 F.3d 1341, 1348-49 (Fed. Cir. 2016). For example, in *Bascom*, the claims were saved at step two because they recited a "non-generic arrangement" by placing "a filtering tool at a specific location" (the ISP server) that provided "a technical improvement over prior art ways of filtering such content." *Id*. at 1350. In *DDR Holdings LLC v. Hotels.com, L.P.*, the claims were eligible at step two because they provided a specific technological improvement to the functioning of the network itself—avoiding transporting users to a different location and instead providing a hybrid webpage. 773 F.3d 1245, 1257-58 (Fed. Cir. 2014). The claims "specif[ied] *how* interactions with the Internet are manipulated to yield a desired result." *Id*. at 1258 (emphasis added). And, recently, in *Cooperative Entertainment, Inc. v. Kollective Technology, Inc*., "[d]rawing all inferences in favor of [the patentee]" on a motion to dismiss, the claims were potentially eligible at step two because they "recite[d] a specific technical solution" for improving network structure—"a

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particular arrangement of peer nodes for distributing content 'outside controlled networks and/or [CDNs].'" 50 F.4th 127, 133 (Fed. Cir. 2022) (cleaned up).

By contrast, the claims here recite only conventional computer-implemented steps and network architecture, without explaining how the desired results are achieved—which add nothing inventive. Indeed, Eolas made sure of that, by successfully advocating for wholly generic, functional constructions of the claims. *Supra* at 11-12. The "distributed application computers" are merely "remote from the client computer"—no particular or innovative architecture or network technology is required. *See Symantec*, 838 F.3d at 1321 (distinguishing *BASCOM*, which was decided "'[o]n [a] limited record'" and "viewed in favor of the patentee" (citation omitted); *Affinity Labs I*, 838 F.3d at 1262 (distinguishing *DDR Holdings*, which "dealt with a patent that required doing something *to* a web page, not simply doing something *on* a web page"); Appx34-36 (distinguishing *BASCOM*).

In sum, "it is clear, from the claims themselves and the specification, that these limitations require no improved computer resources [that the applicant] claims to have invented, just already available computers, with their already available basic functions, to use as tools in executing the claimed process." *SAP*, 898 F.3d at 1169-70. As Eolas's claims add nothing inventive, the district court correctly held them ineligible.

B.   Eolas Identifies Nothing Inventive

Eolas's step two arguments (Blue Br. 54-59) fail for three reasons.

First, the purportedly unconventional features that Eolas identifies—browsers configured with applications invoked to provide interactivity, and interactivity in webpages (Blue Br. 55-56)—are tied to the abstract idea itself, which cannot supply the inventive concept. *Simio*, 983 F.3d at 1363-64; *BSG*, 899 F.3d at 1290. Likewise, Eolas's "combination of elements" boils down to applying the abstract idea on the web. *See* Blue Br. 56-57. For example, Eolas identifies nothing in the specification describing a technology-based solution that is specifically captured in the claims' combination of elements. Appx35-36. Step two turns on whether the claims add anything inventive "apart from" the abstract idea, *Chamberlain*, 935 F.3d at 1348-49 (citation omitted), and Eolas never undertakes that inquiry. Eolas's cursory step two analysis is flawed for that reason alone.

Second, Eolas argues that the district court improperly "collapsed its step two analysis into its analysis at step one." Blue Br. 57. That is incorrect. The court's thorough discussion properly addressed—and rejected—the elements that Eolas raised at step two. Appx30-36. The court first determined that the limitations that Eolas relied upon "embody the abstract idea" itself, and thus could not add anything inventive at step two. Appx32. That is squarely in line with this Court's precedent. *Simio*, 983 F.3d at 1363-64; *BSG*, 899 F.3d at 1290. To the extent the analysis

overlapped, as the Court recently reiterated: "'[T]he two stages are plainly related:

… many of our opinions make clear that the two stages involve overlapping scrutiny

of the content of the claims,' …. As such, our precedent rejects … effort[s] to draw

a bright line between the two steps." *CareDx, Inc. v. Natera, Inc.*, 40 F.4th 1371,

1379 (Fed. Cir. 2022) (citation omitted).

In any event, the district court did not stop there. It held, based on the

specification, that "[t]he remaining aspects of the asserted claims" required only

generic and basic components (e.g., client computers, servers, remote computers)

and functions (e.g., communication over the Internet, data processing, and transfer).

Appx32-33 & n.13. It also distinguished this Court's decision in *Bascom* and

rejected Eolas's other arguments. Appx33-36. The district court did not merge the

two steps, but properly analyzed each.

Third, Eolas improperly conflates ineligibility under § 101 with novelty and

non-obviousness under §§ 102 and 103. Eolas insists that the district court's ruling

rejecting an obviousness-type double patenting challenge somehow forecloses

finding the asserted claims non-inventive at step two or should have at least created

a fact issue. Blue Br. 57, 59. But the district court made no findings as to what was

or was not "routine" as Eolas asserts. *Id.* Rather, the court simply found that

Defendants submitted "no evidence" of prior art with that motion demonstrating that

it was "routine" in the prior art to perform the functions on the web. *Supra* at 13.

Thus, the court held that Defendants had not met their burden on that motion because the asserted claims were limited to the web context. Appx13643.

Regardless, as the court properly found (Appx33-34), obviousness and eligibility are "separate issues." *Two-Way Media*, 874 F.3d at 1339-40. This Court frequently finds claims ineligible as a matter of law *despite* being novel, non-obvious, or even "[g]roundbreaking." *SAP*, 898 F.3d at 1163; *see Simio*, 983 F.3d at 1364; *Symantec*, 838 F.3d at 1311, 1315; *Affinity Labs I*, 838 F.3d at 1263. Moreover, this Court routinely holds that reciting a claimed invention on the Internet merely confines it to a particular technological environment, which adds no inventive concept. *Ultramercial, Inc. v. Hulu, LLC*, 772 F.3d 709, 716 (Fed. Cir. 2014) ("[U]se of the Internet is not sufficient …."); *Capital One*, 792 F.3d at 1366 ("An abstract idea does not become nonabstract by limiting the invention to a particular … technological environment, such as the Internet"). Here, too, the "World Wide Web" limitations—even if different from prior art—require only a particular technological environment and, as a matter of law, cannot confer eligibility. Appx34.

The district court correctly held that the claims add nothing inventive apart from the abstract idea and, thus, granted summary judgment for lack of patent eligible subject matter under § 101.

CONCLUSION

The district court's judgment should be affirmed.

Dated: December 15, 2022

Respectfully submitted,

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CERTIFICATE OF COMPLIANCE

Pursuant to Federal Rule of Appellate Procedure 32(g)(1) and Federal Circuit Rule 32(b)(3), I hereby certify that the foregoing brief complies with the type-volume limitations in Federal Rule of Appellate Procedure 32(a)(7)(B) and Federal Circuit Rule 32(b) because it contains 13,999 words, excluding the parts of the brief exempted by Federal Rule of Appellate Procedure 32(f) and Federal Circuit Rule 32(b)(2).

I further certify that this brief complies with the typeface requirements of Federal Rule of Appellate Procedure 32(a)(5), (6) because this brief was prepared using Microsoft Word 365 in 14-point Times New Roman font.

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